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## Re: ISAB visit November 2019

Dear Rector, dear Prorector,

Below is a brief summary of the impressions obtained by the MUNI ISAB during its last visit.

I would like to apologise for its delayed arrival – I had a very hectic program these last few weeks.

I sincerely hope that you will find our remarks useful in helping you attain the ambitious goals you have set yourselves.

With warm regards and best wishes for the coming festive season,

Josef Jiricny

## Report of the International Scientific Board of the Masaryk University, Brno (November 2019)

The ISAB visited MUNI on the 18th and 19th November 2019. On the first morning, the ISAB visited the Campus at Bohunice and was introduced to Bioskop, a science learning centre for schoolchildren led by Lumir Krejci. This is a very impressive and important facility run by highly-motivated young students and instructors that is fulfilling an important function of introducing children to hands-on scientific experiments and thus also bringing MUNI into public light. The persons running this facility should be commended.

The ISAB then visited CEITEC and was introduced to the structural biology work of an ERC holder Pavel Plevka, who is using cryo-electron microscopy to determine the 3-D structure of bacteriophages and viruses. This is a cutting-edge facility which allows Plevka privileged access to the machine, which puts him in a very favourable position compared to his competitors, given the extremely high demand for measuring time in the rest of the world.

Upon return to the main University building, the ISAB was introduced to the new leadership of MUNI, namely to the vice-rector for research, Sarka Pospisilova and the new rector, Martin Bares. The rector provided the board with an overview of his future goals and strategies, which included among the priorities an improvement in the world ranking of MUNI and its HR policy, as well as a revision of the distribution of university funds. His plan is commendable and, although the task is formidable, the rector has highly-talented and qualified support staff and considerable infrastructure that he can depend on. MUNI has performed very well in the past few years when criteria such as publications in top journals, recruitment of international students, obtaining competitive funding and forming links with other European Universities are concerned. Indeed, in some of these criteria MUNI performance surpassed those of Prague Charles University. However, the presentation revealed a worrying statistic: an extremely high drop-out rate of PhD students. The discussion that followed this presentation focussed on the reasons underlying this phenomenon.

During its first visit in 2016, the ISAB listed restructuring of doctorate studies at MUNI as one of its top priorities, emphasising the importance of the revision of recruitment and supervision criteria in order to ensure that the number of PhD students at MUNI is reduced and that every attempt is made to recruit only highly-motivated individuals. In order to achieve this goal, it was suggested that the PhD Programs be substantially reduced in number and coordinated such that their recruitment criteria would not only improve the quality of the incoming students, but also ensure their competent supervision, with the help of bespoke PhD committees consisting of three persons: direct supervisor, internal expert (or doctor-father) and an external expert. It appears that, despite considerable progress, these recommendations have not been implemented in all faculties and institutes to date and that the number of PhD Programs remains high. The scope of these programs should be to facilitate interaction of students within broader disciplines to provide them with a more comprehensive view of their field, but also to offer them further education (e.g. in scientific writing, grant writing skills, science ethics etc.) and this requires critical mass. An interaction with peers in the form of progress reports and joint retreats also

allows the students to judge their progress and gain novel insights and new ideas through listening to the presentations of others and through informal discussions. The ISAB sees the implementation of its recommendations as a top priority, especially in respect of improving supervision by establishing 3-person committees for each student, but it also understands that adoption of these recommendations must be compatible with the given disciplines. This discussion was extended during the second day presentation by the vice-deans.

The rector's presentation was followed by an overview of the activities of the Research Office, competently led by Lukas Palko and ably-assisted by Monika Sieberova, who listed the considerable achievements of the University during the past review, as well as the progress that was made in implementing the original set of ISAB recommendations. The MUNI should be proud of its achievements and continue in its efforts to strive for further improvement.

The final presentation by Sarka Pospisilova concerned the current standing of MUNI in international rankings. She reiterated the rector's determination to move the University out of the "anonymous" 551-560 bracket and bring it close to that of the larger rival, Prague Charles University. There followed an extensive discussion concerning the possibilities of attaining the goals with the means available. Although some of the categories where MUNI has so far failed to reach the desired standard were easily identified, the ISAB encouraged the RO to invest some effort into the analysis of the ways the rankings are generated and to become proactive in seeking solutions that are relatively easily attained, before embarking on those that require substantial changes over longer time periods. The ISAB believes that MUNI ought to improve its presence online (especially the web site which would benefit from outside professional input, Twitter, Facebook), MUNI logo (corporate image) must be included in all presentations by faculty and MUNI members at international and national meetings revamp, its web page and establish formal links to high-ranking universities (Utrecht, others ?) to increase its international visibility through exchange of personnel, ranging from students through postdocs to faculty.

The closing presentation of the day concerned the planned restructuring of the distribution of University funds. The ISAB noted the substantial effort that this required and agrees that some measures are necessary and timely. However, it suggests that every effort should be made to reflect the differences between humanities and sciences. As a first step these adjustment might go beyond the use of some different indicators for Arts and Humanities faculties and Sciences and Medicine, as planned, to varying the weights given to the different indicators for different groups of faculties. It was recognised that any attempt at estimating the performance of individual institutes with a set of "one-size-fits-all" criteria will not be fair and thus that the only way to estimate how institutes are performing within their respective fields is to have them evaluated by a group of peers. Subsequent to this, the deviation from this benchmark will be clearly visible and will help decide how the institute is performing not only compared to its past performance, but also compared to its peers at home and abroad. Thus, current funding could be distributed according to the new plan of the rectorate, but an effort should be made to have all institutes reviewed by an expert panel over the coming 5-year period to establish a benchmark and subsequently to distribute funds according to departure from this "norm". In the

long run, these criteria will allow to judge the performance of the separate faculties in a fair and objective way and to fine-tune the funding distribution model according to these results. This future strategy ought to be clearly communicated to the MUNI staff and it should be clear to all that the goal of the exercise is to improve the performance of all faculties and the MUNI as a whole.

The second day presentations by the deans and vice-deans of the individual faculties showed how much time and effort had been devoted towards adopting the recommendations of the ISAB, particularly with respect to the PhD student numbers and quality, as well as the number of PhD programs. The ISAB acknowledged this and commends the faculties for their efforts. However, it also stresses that the ISAB recommendations should be adopted by the MUNI faculties only when they will lead to the improvement of the student intake and the quality of their supervision and output.

The ISAB would like to congratulate the MUNI on its efforts and to thank it for its openness and its will to implement the ISAB recommendations.